

Supplementary Table 1. Relative Risk and 95% Confidence Intervals (CI) for second cancers after invasive postmenopausal breast cancer associated with BMI (per 5kg/m²), Kaiser Permanente Breast Cancer Survivors Cohort (1990-2017)

Outcome	No. Cancers	Person-years	Adjusted ^a	
			Relative Risk (95% CI)	P-value
All Cancers	610	31644	1.07 (0.997-1.14)	0.059
Obesity- related Cancers	393	31644	1.08 (0.99-1.17)	0.076
Breast Cancers	206	31644	1.11 (0.99-1.24)	0.063
ER-positive Breast Cancers	145	31644	1.14 (1.00-1.29)	0.055

^aAdjusted for study site, race/ethnicity, age, comorbidity index, receipt of radiation, receipt of chemotherapy, receipt of hormonal therapy, ER and PR status, stage and year of diagnosis.

Supplementary Table 2. Relative Risk and 95% Confidence Intervals (CI) for second cancers after invasive ER-positive breast cancer associated with BMI (per 5kg/m²) among postmenopausal women only, Kaiser Permanente Breast Cancer Survivors Cohort (1990-2017)

Outcome	No. Cancers	Person-years	Adjusted ^a	
			Relative Risk (995% CI)	P-value
All Cancers	646	38175	1.08 (1.01-1.15)	0.017
Obesity- related Cancers	398	38175	1.14 (1.06-1.24)	0.0008
Breast Cancers	251	38175	1.14 (1.03-1.26)	0.009
ER-positive Breast Cancers	186	38175	1.16 (1.03-1.30)	0.011